DEPARTMENT OF THE ARMY HEADQUARTERS, U.S. ARMY FIELD ARTILLERY CENTER AND FORT SILL FORT SILL, OKLAHOMA 73503

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Information Management: Automation INFORMATION TECHNOLOGY PROCUREMENT PROCEDURES

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1. PURPOSE. This memorandum provides supplemental requirements to contracting/purchasing regulations specifically for procurement of Information Technology (IT). It specifies types of products to purchase (Preferred and Supported Products List), a method to show the investment in new technology is worthwhile (Information Technology Investment Assessment), assurance products are Year 2000 compliant, and procedures for both IMPAC and purchase requests.

^{*}This memorandum supersedes USAFACFS Memo 25-72, 28 June 2000.

2. SCOPE. Policy and procedures contained here apply to Training Command, IIId Armored Corps Artillery, and Garrison Activities.

3. REFERENCES.

- a. U.S. Army Training and Doctrine Command Standard Operating Procedures 97-1, International Merchant Purchase Authorization Card (IMPAC) Instructions.
- b. U.S. Army Field Artillery Center and Fort Sill Supplement 97-1, International Merchant Purchase Authorization Card (IMPAC) Instructions.
- c. U.S. Army Field Artillery Center and Fort Sill Standard Operating Procedure, Government-wide Commercial Purchase Card, 1 June 1999.
- d. Training and Doctrine Command Pamphlet 25-72, Information Systems for TRADOC Organizations and Installations, 1 October 1997 (under revision).
- e. TRADOC FY 2001 Desktop Computer Preferred and Supported Product List.

4. INFORMATION TECHNOLOGY PURCHASES.

- a. Procurement of IT follow all property accountability, purchasing and financial procedures with added requirements to insure investments in technology are approved from a central organization on the installation and are Year 2000 compliant solutions. This approval is performed by the Directorate of Information Management and is in support of the letter and intent of public law, specifically the Information Management Technology Reform Act of 1996 (Clinger-Cohen Act).
 - b. IT is procured through one of two methods.
- (1) Purchase request, using DD Form 1348-6 or DA Form 3953 submitted to DOIM for acquisition. DOIM will prepare authentication IAW TRADOC Pam 25-72 and forward to Directorate of Contracting or the TRADOC Acquisition Center for purchase.
 - (2) DOIM IMPAC purchase.
- c. Units may not purchase IT equipment or software with their IMPAC card. Units may purchase expendable IT supplies

their IMPAC card. These supplies consist of, but are not limited to: ink cartridges, floppy disk, blank CD media, ZIP cartridges, and computer cables.

d. The Installation VI Manager (TSC) must approve Visual Information (VI) and do not require DOIM approval. Sample VI items are: digital cameras, video cameras, and projection systems.

5. YEAR 2000 COMPLIANCE.

- a. Whether an information system is purchased by a purchase request or by IMPAC card, each item must be year 2000 compliant. Federal Acquisition Regulation (FAR), paragraph 39.106, mandates all information technology acquired or contracted to perform date/time processing involving dates subsequent to 31 December 1999 be Year 2000 compliant.
- b. This requirement will be met by completing a statement as part of the Fort Sill 496 (Information Technology Assessment Worksheet) as explained in appendix B, paragraph 7.

PREFERRED AND SUPPORTED PRODUCTS LISTS.

- a. All products whether purchased by IMPAC or purchase request, must meet the minimum standards specified in this list (see appendix A). Maintenance upgrades or replacement parts are only required to consider the minimum standards, they are not mandatory. When purchasing supplies, consider the Federal Supplies Schedules.
- b. Department of the Army and TRADOC publish a consolidated list of features for desktop computers intended to set a common minimum standard for purchases. Standards for operating systems are more specifically defined in the Joint Technical Architecture-Army (JTA-A). Fort Sill cannot staff support personnel fluent in all vendor products. TRADOC Pam 25-72 specifically permits DOIMs to establish preferred and supported product lists for equipment and software.

7. FORT SILL 496 (INFORMATION TECHNOLOGY ASSESSMENT WORKSHEET).

a. The Information Management and Telecommunications Reform Act of 1996, (IMTRA, Clinger-Cohen Act) mandates assessment of every investment in information technology before expending funds. Added benefit outweighing possible risk must be demonstrated to the Chief Information Officer (CIO) of the

installation for procurement approval. The National Defense University, Information Management College, teaches this worksheet as the simplest of several available methods to meet the letter of the law.

- b. The intent is to make a fair assessment not only of the best product to purchase but whether a new piece of automation is required at all.
- c. The assessment worksheet (FS 496) is a matrix of 6 values and 4 risks evaluated with standardized definitions. It also incorporates a "weight" factor to allow commander's guidance to influence procurements. It also includes the required statement for Year 2000 compliance. Appendix B explains how to complete the worksheet. The assessment worksheet is available on the following Fort Sill web site--

http://sillwww.army.mil/doim/FS_Blank_Forms/FS_BLANK_FORMS.htm.

- d. Requests, regardless of procurement method, require this assessment. Exceptions to this assessment are listed below.
- (1) Repair or replacement parts/components do not require this assessment. Replacing a broken hardware item with an item matching the standards listed in the preferred and supported product list, appendix A, does not require an assessment. Example: Replacing a 14-inch monitor that is uneconomically repairable with a 17-inch monitor does not require an assessment.
- (2) Replacing or upgrading hardware to stay current with the standards listed in the preferred and supported products does not require an assessment. You are required to turn in the old end item being replaced and you still must certify Y2K compliance.
- (3) Commercially available software listed in appendix A does not require an assessment.

8. IT IMPAC CARD ACCOUNTS.

a. IMPAC credit cards provide an expedient means to purchase automation products. Paperwork to complete purchases is minimal allowing the customer to shop for the best product and price. IMPAC cards are not intended to circumvent required DOIM review of larger purchases and investments in technology.

- b. IIId Armored Corps Artillery possess their own IMPAC credit cards with funding authorization to purchase ADPE. Obtain written DOIM approval prior to purchase.
- c. Training Command possess a limited number of IMPAC credit cards with funding authorization to purchase ADPE. Obtain written DOIM approval prior to purchase.

9. IT PURCHASE PROCEDURES.

- a. IIId Armored Corps Artillery IMPAC Card Purchase.
- (1) Send electronic memorandum and electronic copy of the Information Technology Assessment Worksheet to the Equipment Analyst, DOIM to check the requirements of the Clinger-Cohen Act and certify Year 2000 compliance. Any request which is a valid hardware replacement or software requirement IAW paragraph 7d (1), (2), and (3) above does not require an assessment worksheet.
- (2) DOIM will return electronic memorandum and worksheet with approval for purchase or disapproval.
 - b. IIId Armored Corps Artillery Purchase Request.
- (1) Submit the Information Technology Assessment Worksheet to the DOIM Equipment Analyst. List the existing information technology equipment or systems with which the item will interact as well as whether the existing systems are Year 2000 compliant.
- (2) DOIM will check IT Assessment Worksheet to ensure it meets the requirements of the Clinger-Cohen Act. If the assessment is disapproved, DOIM will return request to the customer. If the assessment is approved, the DOIM Equipment Analyst will prepare a DA Form 3953 and forward it to the Directorate of Contracting or the TRADOC Acquisition Center for purchase. Any request which is a valid hardware replacement or software requirement IAW paragraph 7c (1), (2), and (3) above does not require an assessment worksheet.
 - c. Training Command IMPAC Card Purchase.
- (1) Send electronic memorandum and electronic copy of the Information Technology Assessment Worksheet to DOIM Equipment Analyst to check the requirements of the Clinger-Cohen Act and certify Year 2000 compliance. Any request which is a valid hardware replacement or software requirement IAW paragraph 7d (1), (2), and (3) above does not require an assessment worksheet.

- (2) DOIM will return electronic memorandum and worksheet with approval for purchase or disapproval.
- d. Training Command and Garrison Activities Purchase Request.
- (1) Contact DOIM Equipment Analyst to obtain pricing for desired items. Provide a description of needed capabilities.
- (2) The Equipment Analyst will research and provide price information. DOIM will provide information electronically to requesting activity.
- (3) Customer submits the Information Technology Assessment Worksheet to DOIM Equipment Analyst. Any request which is a valid hardware replacement or software requirement IAW paragraph 7d (1), (2), and (3) above does not require an assessment worksheet. List the existing information technology equipment or systems with which the item will interact as well as whether the existing systems are Year 2000 compliant.
- (4) DOIM will check the IT Assessment Worksheet to ensure it meets the requirements of the Clinger-Cohen Act and certify Year 2000 compliance. DOIM will notify the customer if the assessment is disapproved. DOIM will prepare and forward a DD 1348-6 to CPBO if the assessment is approved.
- (5) CPBO will assign a document numbers and return the DD 1348-6 to DOIM for procurement.
- (6) DOIM Equipment Analyst will procure the item by IMPAC or prepare a DA 3953 and forward it to the Directorate of Contracting or the TRADOC Acquisition Center for purchase.
- (7) Equipment purchases are delivered to CBPO for pickup by the gaining unit.

10. SOME USEFUL TIPS.

- a. Plan early; use reasonable delivery dates. Avoid expending funds on overnight delivery charges.
 - b. Consolidate resources when possible.
- c. Ensure purchases meet mission needs and not personal desires.

d. Understand the system requirements needed to accomplish your mission and ignore vendor sales promises.

11. POINTS OF CONTACT.

- a. DOIM Budget Analyst, 442-5927, email: lindseys@sill.army.mil.
- b. DOIM Equipment Analyst, 442-1338, email: minnickg@sill.army.mil.

APPENDIX A

TRADOC Preferred and Supported Minimum Desktop Hardware List

TRADOC FY01 PREFERRED AND	CURRENT FORT SILL MINIMUM
SUPPORTED MINIMUM DESKTOP	STANDARDS
HARDWARE CONFIGURATION	
at least 500 MHz Pentium-class	800MHZ Pentium III w/512 Cache
at least 128 MB RAM expandable	128 MB RAM expandable to 256 MB
to 256 MB	
at least 12 GB Hard Drive	20 GB hard Drive
Ethernet LAN interface 10/100	Ethernet LAN Card 10/100 Base T
BASE T	
1 PCMCIA adapter supporting 2	1 PCMCIA adapter supporting 2
type II and 1 type III	type II and 1 type III
Video controller - minimum 256	Video controller - minimum 256
colors, 1024x768 pixels; 4 MB	colors, 1024 x 768 pixels; 16
memory, upgradable; drivers for	MB memory, upgradable; drivers
operating system	for operating system
at least 24X CD-ROM Reader	At least 40X CD-ROM Drive
3.5" Floppy Drive capable of	3.5" 1.44 MB Floppy Drive
reading and writing both 1.44MB	
and 720KB diskettes	
1-parallel port, 2-serial	1 parallel, 2 serial, 2 USB
ports, 2 USB connections	ports
Pointing device with a minimum	Microsoft 2 button PS2 Mouse
of two buttons	
17" color monitor, SVGA	17" color monitor, SVGA
16-bit sound card (for	32 bit sound card and drivers
multimedia applications) and	for operating system
drivers for operating system	
Expansion slots: 3 PCI	Expansion slots: 3 PCI
Speakers: at least 5 watts	Speakers: at least 5 watts
output	ouput
101 key qwerty keyboard	104 plus keyboard
512K cache or 256K integrated	512k Cache

TRADOC Preferred and Supported Desktop Software and Operating System List

CATEGORY	TRADOC FY01 PREFERRED AND FORT SILL SUPPORTED DESKTOP SOFTWARE AND OPERATING SYSTEM CONFIGURATION			
1. Desktop Client Operating	Microsoft Windows 2000			
System.	Professional			
2. IP Protocol Stack (includes	Microsoft			
TELNET).				
3. Office Suite.	Full Suite:	(1) Microsoft		
	Office 2000			
	Word	Word		
	Processing:			
	Spreadsheet: Excel			
	Presentations: PowerPoint			
	Data Base: Access			
	Project Project			
	Management:			
4. Office Management.	Outlook 2000			
5. Internet Browser (include	(2) MS Explorer 5.5 (128-bit			
FTP and Newgroups).	encryption)			
6. Forms.	FormFlow 2.22			
7. Multimedia Authoring.	Asymetrix Multimedia Toolbook, CBT Edition			
8. Security.	Norton AntiVirus (DOD License)			
9. DVTC.	PictureTel			

⁽¹⁾ -- There may be inconsistencies between Office 97 and Office 2000 Access files.

⁽²⁾⁻⁻Provided as a component of Windows 2000.

APPENDIX B

Information Technology Assessment Worksheet (FS 496) Instructions

- 1. These steps describe how to complete the worksheet in figure B-1.
 - a. Enter your organization name in the space provided.
 - b. Enter a brief statement of the need.
- c. Leave the "Item Requested" line blank until determining which option wins the assessment.
- d. Develop three options to be assessed. Each option needs to be a different solution to the requirement not merely a different brand or product. For example one option may be a highend workstation, one may be a low-end workstation, and one option may be sharing a workstation with another action officer or project. Summarize each option in several lines of text in the spaces provided. Ensure that each product or solution is year 2000 compliant.
- e. Weight each of the values and risks. Prioritize the values with weights from 1 to 6, never using the same number more than once (6 being the highest rating and 1 being the lowest). Prioritize the risks with weights from 1 to 4, never using the same number more than once.
- f. Assess each option against the standard definitions for Values and Risks listed below. Determine which definition fits the option to obtain a score for that definition. Enter the score in the worksheet in the column provided. Multiply that score by the weight and record the result on the worksheet.
- g. Sum the value, then sum the risk for each option. Record the results on the worksheet.
- h. Obtain an overall total score for each option by subtracting the total risk from the total value. Record the result on the worksheet.
- i. List the existing information technology equipment or systems, which the item will interact with as well as whether the existing systems are Year 2000 compliant.

- j. Fill in the "Item Requested" line previously left blank from step b.
- k. Enter the document number obtained from your property book officer necessary for property accountability.
- 1. The Organization Commander (05 or above) or Program Director (GS14 or above) signs and dates assessment.
- m. Computations to show return on investment are not submitted with the assessment, but must be available if requested.
- 2. Standard definitions for Values and Risks.

Values - benefits to the organization as a result of purchasing automation

- 1. Return on Investment (ROI) risk adjusted, discounted organization-wide. As a general rule ROI value of 2 should be used in small ADPE PC type purchases. The life expectancy of most ADPE is less than 5 years. Single workstation PCs fit this category. A ROI calculation and spreadsheet will be required on major purchases or upgrades (normally in excess of 10k).
 - O Negative ROI over next 5 years
 - 1 0-50% over next 5 years
 - 2 51-100% over next 5 years
 - 3 101-300% over next 5 years
 - 4 301-600% over next 5 years
 - 5 Over 600% over next 5 years
- 2. Strategic Match extent to which it contributes to achieving one or more organization strategic goals.
 - 0 Makes no contribution to achieving a strategic goal
 - 1 Contributes indirectly to at least one strategic goal
- 2 Modestly contributes directly to at least one strategic goal
- 3 Significantly contributes directly to at least one strategic goal
- 4 Significantly contributes directly to more than one strategic goal
- 5 Contributes in a major way directly to one or more strategic goals

- 3. Efficiency extent to which it provides ability to complete key functions for an organization. Makes the organization perform better, faster and cheaper. Improves quality, timeliness, and accuracy of product or service deliveries, in communications with customers and other stakeholders, and/or in the fees charged.
 - O Does not contribute to efficiency
- 1 Does not contribute now but may improve efficiency in the future
 - 2 Contributes indirectly to efficiency
 - 3 Modestly contributes directly to efficiency
 - 4 Substantially contributes directly to efficiency
 - 5 Will produce a substantial efficiency
- 4. Management Information extent to which it will produce better information for managing the organization.
 - O Unrelated to organization, management information needs
- 1 Will produce some information useful to managers of organization processes
- 2 Will produce some information useful in managing some activities in an organization process
- 3 Provides essential information for managing at least one activity in a organization process
- 4 Provides essential information for managing more than one activity of a organization process
- 5 Provides essential information for managing activities in more than one organization process
- 5. Response degree to which failure to do the project will cause damage to or hinder the organization
- 0 Can be postponed for 12 months or more without negative effect
- 1 Can be postponed for at least 12 months without negative effect but project cost may increase
 - 2 Postponement for up to 12 months will incur mild damage
- 3 Postponement for up to 12 months will incur significant damage
- 4 Postponement will risk potentially permanent loss of important business
 - 5 Postponement could risk the survival of the organization

- 6. Strategic Info Systems Architecture degree to which the information technology aspects of the proposal are aligned with the overall information systems strategies of the major subordinate command or installation.
 - O Significantly conflicts with the plan or direction
 - 1 Mildly conflicts with the plan or direction
 - 2 No effect on the plan or direction
 - 3 Is compatible with the plan or direction
 - 4 Supports the plan or direction
 - 5 Is an integral part of the plan or direction

Risk - possibility of negative effects as a result of purchasing,
installing and maintaining an automation purchase

- 1. Organizational Risk extent of exposure to risks of concern to the organization and the degree to which such risks are managed. Positive risk management factors include effective management of change, project or project module is 18 months or less, amount of investment funds required is under 10% of overall IT budget.
 - O Helps to mitigate existing risks
 - 1 No increase in risks or exposure to risks
- 2 Would incur mild risk that should not be difficult to manage
- 3 Would incur increased risk in one or more areas that may be difficult to manage
- 4 Could incur a major risk that is of concern to the organization
- 5 Will incur serious damage to performance or be a major risk to survival of the organization
- 2. Definitional Uncertainty degree the requirements (& specifications) are known, valid, reliable.
- O Requirements are firm. Complexity is not a problem. Very predictable.
- 1 Requirements are moderately firm. Some complexity. Relatively good predictability.
- 2 Requirements are likely to change, as the needs are better understood. Some complexity.
- 3 Requirements will change because they relate to a dynamic or complex area or environment.

- 4 Requirements only partially known. They relate to a dynamic or complex area or environment.
- 5 Requirements substantially unknown or unclear. Much complexity or constant change.
- 3. Technical Uncertainty degree of technical risk, such as the technology management ability, technical skills needed, software dependencies, hardware dependencies, and complexity of interfaces or integration.
 - O There is no uncertainty regarding any technical factor
- 1 Requires no new skills, software, or hardware to perform the proposed effort
- 2 Requires some new skills, but no new software, or hardware to perform the proposed effort
- 3 Requires new skills or hardware; software is available commercially
- 4 Requires new skills, new hardware, development of new software, or significant integration
- 5 Requires many new skills, unproven hardware, substantial development of new software, or a major integration effort
- 4. Info Systems Infrastructure Risk Degree of nonproject investment necessary (e.g., will new or additional support services be required?) and/or the extent it will burden the present infrastructure.
 - 0 No investment required; no burden added.
- 1 Some minor infrastructure changes will be required, minimal investment is involved.
- 2 Some changes in several areas will be required, modest investment is involved
- 3 Moderate changes required and will use a significant part of the infrastructure support capacity
- 4 Changes affecting many areas will be required, significant investment, could seriously burden the present IS infrastructure and degrade performance of other functions
- 5 Substantial IS infrastructure investment will be required or will seriously burden present infrastructure and performance.

Information Technology Assessment Worksheet

Organization: Dir of Internal Operations Item Requested: 8 ea Desktop Computers.

Document or Control Number:

BACKGROUND: DIO currently conducts most of its work on computers which includes preparing numerous slide presentations, briefings, and unit, personnel, and maintenance status reports for presentation in various locations. The tremendous workload requires more soldiers to have individual workstations to work on so they can efficiently keep up with the multiple tasks given to them daily. Sometimes report production is delayed because some soldiers share the same computers. As a result, some areas of our training and readiness are impaired because some presentations or reports can not be prepared in time to deliver the information. Purchasing new desktop computers will give our soldiers the proper tools to do their work and keep up with our workload. Furthermore, this purchase will help us better respond to last minute changes to training and produce timely and quality products.

Option 1:

Do nothing. This option will continue to force soldiers of the DIO to share computers and experience reduced product output efficiency and quality and increase work back load. We will still experience difficulty in responding to last minute changes to tasks that impact the accuracy and completeness of our reports, briefings, and presentations.

Option 2:

Borrow equipment needed to conduct training. This option is not possible as an effective solution because the soldiers currently share computers to do their work. Also, conflicts occur when soldiers save information on the same computer that is required for use at the same time by two or more soldiers. Additionally, some tasks require immediate responses that require the person whose mission has the highest priority to ask someone to stop working on a computer that is in use.

Option 3:

Purchase 8 Desktop Computers. This option will immediately correct all stated problems— The loss of work productivity and failure to meet some daily and short notice tasks.

Figure B-1. Information Technology Assessment Worksheet

		Opti	ion 1	Opti	ion 2	Opti	lon 3
Value	Weight	Score	Result	Score	Result	Score	Result
1. ROI/Cost	6	0	0	0	0	2	12
Reduction							
2. Strategic	1	2	2	5	5	1	1
Match							
 Efficiency 	5	1	5	2	10	5	25
4. Management	4	3	12	4	16	4	16
Information							
5. Competitive	3	4	12	1	3	3	9
Response							
6. Strategic IS	2	5	10	3	6	0	0
Architecture							
Value Total			41		40		63
(sum of							
results)							

		Opti	ion 1	Opti	ion 2	Opti	ion 3
Risk	Weight	Score	Result	Score	Result	Score	Result
1.	4	0	0	0	0	0	0
Organizational							
Risk							
2. Definitional	1	0	0	0	0	1	1
Uncertainty							
3. Technical	2	0	0	1	2	3	б
Uncertainty							
4.	3	0	0	1	3	1	3
Infrastructure							
Risk							
Risk Total			0		5		10
(sum of							
results)							
Overall Total			41		35		53

Option 3 is the overall best solution, is year 2000 compliant, and is compatible with current systems and hardware:

Comman	der/Director	rJoh	n Doe	Date	1 Sep 00
				-	
Chief	Information	Officer	Initials	Date	

FS Form 496 DOIM (1 Sep 00)

Figure B-1. Information Technology Assessment Worksheet (cont)

(ATZR-U)

FOR THE COMMANDER:



DAVID C. RAULSTON COL, FA Chief of Staff

Phyllis P. Bacon Director of Information Management

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